

Refine Search

Search Results -

| Term | Documents |
|----------------------|-----------|
| (25 AND 26).USPT. | 1 |
| (L25 AND L26).USPT. | 1 |

Database:

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 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search:

L27

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Search History

 DATE: Tuesday, May 11, 2004 [Printable Copy](#) [Create Case](#)

Set Name Query
side by side

Hit Count Set Name
result set

DB=USPT; PLUR=YES; OP=ADJ

L27 l25 and L26

1 L27

L26 Bos

15114 L26

L25 l24 and L23

28 L25

L24 l20 and L22

39 L24

L23 Exe

1058 L23

L22 IO or I/O

85629 L22

L21 l20 and exec engine

0 L21

L20 l18 and L19

39 L20

L19 Java

7607 L19

L18 l5 and l8 and l12 and l14

65 L18

L17 l16 and l8

1 L17

L16 l6.ab. and l14 and l5

9 L16

L15 l13 and L14

4 L15

→ 7th is Applicants patent

→ applicants patent

| | | | |
|------------|-----------------------------------|--------|------------|
| <u>L14</u> | cyclic\$ or interrupt\$ | 471566 | <u>L14</u> |
| <u>L13</u> | l11 and L12 | 19 | <u>L13</u> |
| <u>L12</u> | control program | 36878 | <u>L12</u> |
| <u>L11</u> | l9 and L10 | 20 | <u>L11</u> |
| <u>L10</u> | execut\$ | 282093 | <u>L10</u> |
| <u>L9</u> | l7 and L8 | 20 | <u>L9</u> |
| <u>L8</u> | object oriented or OOP | 11201 | <u>L8</u> |
| <u>L7</u> | l5 and L6 | 109 | <u>L7</u> |
| <u>L6</u> | programmable controller\$1 | 6589 | <u>L6</u> |
| <u>L5</u> | function block | 12304 | <u>L5</u> |
| <u>L4</u> | L3 and bootstrap | 1 | <u>L4</u> |
| <u>L3</u> | PLC and Bos and ExE | 1 | <u>L3</u> |
| <u>L2</u> | PLC and Box and ExE | 1 | <u>L2</u> |
| <u>L1</u> | PLC and Box and ExE and Wd and IO | 0 | <u>L1</u> |

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 4 of 4 returned.

☐ 1. Document ID: US 6263487 B1

L15: Entry 1 of 4

File: USPT

Jul 17, 2001

US-PAT-NO: 6263487

DOCUMENT-IDENTIFIER: US 6263487 B1

TITLE: Programmable controller

DATE-ISSUED: July 17, 2001

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------|-----------|-------|----------|---------|
| Stripf; Wolfgang | Karlsruhe | | | DE |
| Wendel; Volker | Hagenbach | | | DE |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|------------|--------|-------|----------|---------|-----------|
| Siemens AG | Munich | | | DE | 03 |

APPL-NO: 09/ 101611 [PALM]

DATE FILED: July 17, 1998

FOREIGN-APPL-PRIORITY-DATA:

| COUNTRY | APPL-NO | APPL-DATE |
|---------|--------------|-------------------|
| DE | 296 00 609 U | January 17, 1996 |
| DE | 296 22 133 U | December 19, 1996 |

PCT-DATA:

| APPL-NO | DATE-FILED | PUB-NO | PUB-DATE | 371-DATE | 102(E)-DATE |
|----------------|------------------|------------|--------------|--------------|--------------|
| PCT/DE97/00068 | January 16, 1997 | WO97/26587 | Jul 24, 1997 | Jul 17, 1998 | Jul 17, 1998 |

INT-CL: [07] G06 F 19/00

US-CL-ISSUED: 717/1; 717/5, 717/6, 709/100

US-CL-CURRENT: 717/171; 718/100

FIELD-OF-SEARCH: 709/100, 709/101, 709/102, 709/104, 709/105, 717/1, 717/4, 717/5, 717/6, 707/10, 707/104, 707/206, 700/23

PRIOR-ART-DISCLOSED:

h e b b g e e e f e ef b e

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|--------------|----------------|--------|
| <u>5297257</u> | March 1994 | Struger et al. | |
| <u>5485620</u> | January 1996 | Sadre et al. | 717/10 |
| <u>5610809</u> | March 1997 | Hideaki | 700/23 |

FOREIGN PATENT DOCUMENTS

| FOREIGN-PAT-NO | PUBN-DATE | COUNTRY | US-CL |
|----------------|-------------|---------|-------|
| 667 693 | August 1995 | EP | |

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"SIMATIC, Programmable Controllers SIMATIC S7," Catalog ST 70, Siemens, 1995.

"Java and Internet Programming," Van Hoff, Dr. Dobb's Journal, Aug. 1995, vol. 20, No. 8, pp. 56, 58, 60-61, and 101-02.

"Java!," T. Ritchey, New Riders Publishing, 1995, pp. 14-19.

"Supporting Microsoft Windows 95," Student Workbook, Course No. 540, Microsoft, Jul. 1995, pp. 120-121.

ART-UNIT: 211

PRIMARY-EXAMINER: Banakhah; Majid A.

ATTY-AGENT-FIRM: Staas & Halsey LLP

ABSTRACT:

A programmable controller suitable for use in a globally distributed automation network. In addition, a universal management engineering and information system for such a globally distributed automation network is described. It is used in a globally distributed automation network.

11 Claims, 4 Drawing figures

| | | | | | | | | | | | | |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawings |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|----------|

☐ 2. Document ID: US 6098116 A

L15: Entry 2 of 4

File: USPT

Aug 1, 2000

US-PAT-NO: 6098116

DOCUMENT-IDENTIFIER: US 6098116 A

TITLE: Process control system including a method and apparatus for automatically sensing the connection of devices to a network

DATE-ISSUED: August 1, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---------------------|------------|-------|----------|---------|
| Nixon; Mark | Round Rock | TX | | |
| Krivoshain; Ken D. | Elgin | TX | | |
| Shepard; John R. | Austin | TX | | |
| Christensen; Dan D. | Austin | TX | | |
| Schleiss; Duncan | Austin | TX | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|-------------------------------|--------|-------|----------|---------|-----------|
| Fisher-Rosemont Systems, Inc. | Austin | TX | | | 02 |

APPL-NO: 08/ 631519 [PALM]

DATE FILED: April 12, 1996

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is related to application by Nixon et al., entitled "A Process Control System Using Standard Protocol Control of Standard Devices and Nonstandard Devices", now U.S. Pat. No. 5,828,851, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System for Versatile Control of Multiple Process Devices of Various Device Types", Ser. No. 08/631,521, filed on Apr. 12, 1996, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Process Control System for Monitoring and Displaying Diagnostic Information of Multiple Distributed Devices" Ser. No. 08/631,557, filed on Apr. 12, 1996, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Nixon et al., entitled "A Process Control System User Interface Including Selection of Multiple Control Languages", now U.S. Pat. No. 5,801,942, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Dove, entitled "System for Assisting Configuring a Process Control Environment", now U.S. Pat. No. 5,940,294, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Nixon et al., entitled "Process Control System Using a Control Strategy Implemented in a Layered Hierarchy of Control Modules", now U.S. Pat. No. 5,862,052, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Dove et al., entitled "System for Configuring a Process Control Environment", now U.S. Pat. No. 5,838,563, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to application by Nixon et al., entitled "A Process Control System Using a Process Control Strategy Distributed Among Multiple Control Elements" now U.S. Pat. No. 5,909,368, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending provisional application by Nixon et al., entitled "Improved Process System", Serial No. 60/017,700, filed Apr. 12, 1996, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto.

INT-CL: [07] G06 F 13/14, G06 F 13/20

US-CL-ISSUED: 710/8; 710/10, 710/62, 709/220, 709/221, 709/250
US-CL-CURRENT: 710/8; 709/220, 709/221, 709/250, 710/10, 710/62

FIELD-OF-SEARCH: 395/209.5, 395/200.51, 395/200.8, 370/94.1, 710/8, 710/10, 710/62,
709/250, 709/220, 709/221

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|---------------|--------------------|------------|
| <u>4302820</u> | November 1981 | Struger et al. | 364/900 |
| <u>4663704</u> | May 1987 | Jones et al. | 364/188 |
| <u>4672530</u> | June 1987 | Schuss | 364/133 |
| <u>4689786</u> | August 1987 | Sidhu et al. | 370/94 |
| <u>4916610</u> | April 1990 | Bapat | 364/300 |
| <u>5006992</u> | April 1991 | Skeirik | 364/513 |
| <u>5063523</u> | November 1991 | Vrenjak | 364/514 |
| <u>5129087</u> | July 1992 | Will | 395/650 |
| <u>5134574</u> | July 1992 | Beaverstock et al. | 364/551.01 |
| <u>5155842</u> | October 1992 | Rubin | 395/575 |
| <u>5293466</u> | March 1994 | Bringmann | 395/114 |
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| <u>5311562</u> | May 1994 | Palusamy et al. | 376/215 |
| <u>5371985</u> | December 1994 | Bristol | 395/800 |
| <u>5432711</u> | July 1995 | Jackson et al. | 364/514 |
| <u>5442639</u> | August 1995 | Crowder et al. | 371/20.1 |
| <u>5444851</u> | August 1995 | Woest | 395/200.1 |
| <u>5475856</u> | December 1995 | Kogge | 395/800 |
| <u>5481741</u> | January 1996 | McKaskle et al. | 395/800 |
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| <u>5491791</u> | February 1996 | Glowny et al. | 395/183.13 |
| <u>5493534</u> | February 1996 | Mok | 365/226 |
| <u>5504902</u> | April 1996 | McGarth et al. | 395/700 |
| <u>5513095</u> | April 1996 | Pajonk | 364/131 |
| <u>5519706</u> | May 1996 | Bantz et al. | 370/85.3 |
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| <u>5526489</u> | June 1996 | Nilakantan et al. | 395/200.02 |
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| <u>5566320</u> | October 1996 | Hubert | 395/474 |
| <u>5576946</u> | November 1996 | Bender et al. | 364/146 |
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| <u>5623592</u> | April 1997 | Carlson et al. | 395/348 |

| | | | |
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| <u>5675748</u> | October 1997 | Ross | 395/284 |
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| <u>5701411</u> | December 1997 | Tran et al. | 395/200.1 |
| <u>5706007</u> | January 1998 | Fragnito et al. | 341/155 |

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| FOREIGN-PAT-NO | PUBN-DATE | COUNTRY | US-CL |
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| 0 522 590 | January 1993 | DE | |
| 2 208 553 | April 1989 | GB | |
| WO 95/04314 | February 1995 | WO | |

OTHER PUBLICATIONS

John R. Gyoriki, "PLC's drive standard buses", Machine Designs, May 11, 1995, pp. 83-90.

Moore Products Co., "Control System", Power Apr. 1995, p. 114, vol. 139, No. 4, Copyright 1995, McGraw-Hill, Inc.

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Robert R. Lyons, "New Telemecanique Programmable Controllers Feature Multiple Programming Languages", Telemecanique, Arlington Heights, IL, Feb. 11, 1995.

Clifford J. Peshek et al., "Recent Developments and Future Trends in PLC Programming Languages and Programming Tools for Real-Time Control", IEEE Cement Industry Technical Conference, May 1993, Toronto, Canada, pp. 219-230.

C.K. Duffer et al., "High-Level Control Language Customizes Application Programs", Power Technologies, Inc., IEEE Computer Applications in Power, .COPYRGT. Apr. 1991, pp. 15-18.

H.J. Beestermoller et al., "An online and offline programmable Multiple-Loop Controller for Distributed Systems", .COPYRGT. 1994 IEEE, pp. 15-20.

Blackwell, "The benefits won't kick-in immediately (Microsoft Windows 95 operating system's multimedia benefits)", Computing Canada, v21, n18, p36(2), Sep. 1, 1995.

Baldasserini, Denmac delivers LAN stats (Denmac Systems Inc's TrenData 2.0), Computer Shopper, v15, n6, p613(1), Jun. 1995.

ART-UNIT: 272

PRIMARY-EXAMINER: Lee; Thomas C.

ASSISTANT-EXAMINER: Perveen; Rehana

ATTY-AGENT-FIRM: Skjerven, Morrill, MacPherson, Franklin & Friell, LLP. Koestner; Ken J.

ABSTRACT:

A digital control system automatically senses when a new controller is attached to a network and determines the number and types of I/O Ports that are attached to the new controller. The digital control system formats and displays the I/O Port information upon request by a user. The digital control system program also includes an automatic configuration program that responds to sensing of a new controller by automatically configuring the input/output (I/O) subsystem. The user adds a new controller without setting any physical switches or nodes. A user optionally supplies configuration information for a device into a database, prior to connection of a device. Upon connection of the device, the device is

automatically sensed and configured using the database configuration information, without setting of physical switches or node address information on the devices.

40 Claims, 25 Drawing figures

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|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|
| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Drawing |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|---------|

☐ 3. Document ID: US 6032203 A

L15: Entry 3 of 4

File: USPT

Feb 29, 2000

US-PAT-NO: 6032203

DOCUMENT-IDENTIFIER: US 6032203 A

TITLE: System for interfacing between a plurality of processors having different protocols in switchgear and motor control center applications by creating description statements specifying rules

DATE-ISSUED: February 29, 2000

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|------------------------|--------|-------|----------|---------|
| Heidhues; Peter Albert | Aukrug | | | DE |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|--------------------------|-------------|-------|----------|---------|-----------|
| General Electric Company | Schenectady | NY | | | 02 |

APPL-NO: 08/ 834569 [PALM]

DATE FILED: April 7, 1997

INT-CL: [07] G06 F 13/10, G06 F 13/42, G06 F 15/163

US-CL-ISSUED: 710/11; 710/30, 710/65, 709/230, 709/232, 709/236, 709/302

US-CL-CURRENT: 710/11; 709/230, 709/232, 709/236, 710/30, 710/65

FIELD-OF-SEARCH: 709/230, 709/232, 709/236, 709/302, 710/105, 710/8, 710/11, 710/30, 710/65

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|---------------|----------------|-----------|
| <u>5414812</u> | May 1995 | Filip et al. | 707/103 |
| <u>5428555</u> | June 1995 | Starkey et al. | 364/528.1 |
| <u>5471596</u> | November 1995 | Brown, III | 707/103 |
| <u>5630101</u> | May 1997 | Sieffert | 395/500 |
| <u>5634010</u> | May 1997 | Ciscon et al. | 709/223 |
| <u>5652911</u> | July 1997 | Venrooy et al. | 395/80 |
| <u>5687373</u> | November 1997 | Holmes et al. | 709/302 |

| | | | |
|----------------|--------------|-----------------|---------|
| <u>5768119</u> | June 1998 | Havekost et al. | 364/133 |
| <u>5793954</u> | August 1998 | Baker et al. | 709/250 |
| <u>5828576</u> | October 1998 | Loucks et al. | 324/118 |

ART-UNIT: 272

PRIMARY-EXAMINER: Lee; Thomas C.

ASSISTANT-EXAMINER: Park; Ilwoo

ATTY-AGENT-FIRM: Cantor Colburn LLP Horton; Carl B.

ABSTRACT:

An interface system for use in switchgear and motor control center applications so that communications may occur between different field devices and process control computers using different protocols and requiring different data formats. The interface system translates fieldbus protocols and data formats using a changeable communication driver module employing a description language defining pieces of data called "telegrams." The telegrams contain object structures related to the communication processor or protocol used by the field devices and process control computers. The system also allows for dynamic configurations given the changeable communication driver.

12 Claims, 9 Drawing figures

| Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. Desc. |
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|-------------|
|------|-------|----------|-------|--------|----------------|------|-----------|-----------|-------------|--------|------|-------------|

☐ 4. Document ID: US 5980078 A

L15: Entry 4 of 4

File: USPT

Nov 9, 1999

US-PAT-NO: 5980078

DOCUMENT-IDENTIFIER: US 5980078 A

TITLE: Process control system including automatic sensing and automatic configuration of devices

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY |
|---------------------|--------|-------|----------|---------|
| Krivoshein; Ken D. | Elgin | TX | | |
| Christensen; Dan D. | Austin | TX | | |

ASSIGNEE-INFORMATION:

| NAME | CITY | STATE | ZIP CODE | COUNTRY | TYPE CODE |
|--------------------------------|--------|-------|----------|---------|-----------|
| Fisher-Rosemount Systems, Inc. | Austin | TX | | | 02 |

APPL-NO: 08/ 799966 [PALM]

DATE FILED: February 14, 1997

h e b b g e e e f e ef b e

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is related to of copending application by Nixon et al., entitled "Process Control System Including Automatic Sensing and Automatic Configuration of Devices", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,519, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System Using Standard Protocol Control of Standard Devices and Nonstandard Devices", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,862, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System for Versatile Control of Multiple Process Devices of Various Device Types", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,521, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Process Control System for Monitoring and Displaying Diagnostic Information of Multiple Distributed Devices", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,557, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System User Interface Including Selection of Multiple Control Languages", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,517, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Dove, entitled "System for Assisting Configuring a Process Control Environment", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,458, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Process Control System Using a Control Strategy Implemented in a Layered Hierarchy of Control Modules", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,520, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Dove et al., entitled "System for Configuring a Process Control Environment", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,863, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "A Process Control System Using a Process Control Strategy Distributed Among Multiple Control Elements", filed on Apr. 12, 1996, U.S. patent application Ser. No. 08/631,518, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto. This application is related to copending application by Nixon et al., entitled "Improved Process System", filed on Apr. 12, 1996, U.S. Provisional patent application Ser. No. 60/017,700, which application is hereby incorporated by reference in its entirety, including any appendices and references thereto.

INT-CL: [06] G06 F 15/16

US-CL-ISSUED: 364/131; 364/138, 364/146, 364/147, 395/200.51, 395/200.52

US-CL-CURRENT: 700/1; 700/17, 700/18, 700/9, 709/221, 709/222

FIELD-OF-SEARCH: 395/284, 395/651-653, 395/823, 395/828-832, 395/834-837, 395/839, 395/200.5, 395/200.51, 395/200.52, 395/200.58, 364/131, 364/138, 364/146, 364/147

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| PAT-NO | ISSUE-DATE | PATENTEE-NAME | US-CL |
|----------------|---------------|--------------------|------------|
| <u>4302820</u> | November 1981 | Struger et al. | 395/598 |
| <u>4663704</u> | May 1987 | Jones et al. | 364/188 |
| <u>4672530</u> | June 1987 | Schuss | 364/133 |
| <u>4689786</u> | August 1987 | Sidhu et al. | 370/255 |
| <u>4916610</u> | April 1990 | Bapat | 395/708 |
| <u>5006992</u> | April 1991 | Skeirik | 706/58 |
| <u>5063523</u> | November 1991 | Vrenjak | 395/200.53 |
| <u>5129087</u> | July 1992 | Will | 395/704 |
| <u>5134574</u> | July 1992 | Beaverstock et al. | 702/84 |
| <u>5155842</u> | October 1992 | Bringmann | 395/114 |
| <u>5307346</u> | April 1994 | Fieldhouse | 370/254 |
| <u>5311562</u> | May 1994 | Palusamy et al. | 376/215 |
| <u>5371895</u> | December 1994 | Bristol | 395/705 |
| <u>5432711</u> | July 1995 | Jackson et al. | 364/131 |
| <u>5442639</u> | August 1995 | Crowder et al. | 371/20.1 |
| <u>5444851</u> | August 1995 | Woest | 709/222 |
| <u>5471190</u> | November 1995 | Zimmermann | 340/310.01 |
| <u>5471461</u> | November 1995 | Engdahl et al. | 370/252 |
| <u>5475856</u> | December 1995 | Kogge | 712/20 |
| <u>5481741</u> | January 1996 | McKaskle et al. | 345/522 |
| <u>5485620</u> | January 1996 | Sadre et al. | 395/710 |
| <u>5491791</u> | February 1996 | Glowny et al. | 714/26 |
| <u>5493534</u> | February 1996 | Mok | 365/226 |
| <u>5504902</u> | April 1996 | McGrath et al. | 395/707 |
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| <u>5519706</u> | May 1996 | Bantz et al. | 455/435 |
| <u>5519878</u> | May 1996 | Dolin, Jr. | 395/200.5 |
| <u>5524269</u> | June 1996 | Hamilton et al. | 710/9 |
| <u>5526489</u> | June 1996 | Nilakantan et al. | 395/200.58 |
| <u>5530643</u> | June 1996 | Hodorowski | 364/191 |
| <u>5549137</u> | August 1996 | Lenz et al. | 137/486 |
| <u>5550980</u> | August 1996 | Pascucci et al. | 709/223 |
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ABSTRACT:

A digital control system with a predetermined configuration automatically senses the connection to a network of a digital device that is not included in the predetermined configuration. The digital device is assigned temporary address information and placed in a temporary state, called a standby state, in which the digital device supplies information to the digital control system allowing a user to access the digital device including access of device information and configuration parameters. Using the device information and configuration parameters, a user selectively commissions the digital device by assigning a physical device tag, a device address, and a device identification, and installing a control strategy to the digital device, thereby placing the digital device in an operational state in communication with the digital control system. In the standby state, a user interrogates to determine the type of device that is attached, determines the role of the device in the context of the digital control system, assigns a physical device tag that assigns the determined role to the device, and verifies connection of the device to the network. Also in the standby state, the user initiates other applications applied to the device, including calibration of the device and configuring the device within the overall control scheme of the digital control system.